CECCHI GUSTAVO & C.
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Safety data sheet

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name **NAUTILUS TWO PACK VARNISH GLOSS COMP.B**
UFI: 5M60-W0JT-T004-KWCT

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use **INDURENTE PER VERNICI**

Identified Uses	Industrial	Professional	Consumer
Prodotto verniciante per nautica - marina	-	☒	-
Prodotto verniciante per usi industriali	☒	-	-
Prodotto verniciante per uso professionale	-	☒	-
Uses Advised Against			
CONSUMATORE: FAI-DA-TE			

1.3 Details of the supplier of the safety data sheet Manufacturer/Supplier:

Cecchi Gustavo & C. srl - Via M. Coppino 253,
55049 Viareggio (LU) ITALY www.cecchi.it - info@cecchi.it

1.4 Emergency telephone number:

+39 0584/383694 - info@cecchi.it
From monday to friday office hours 8:30 - 12:30, 14:00 - 18:30

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Flammable liquid, category 3	H226	Flammable liquid and vapour.
Acute toxicity, category 4	H332	Harmful if inhaled.
Aspiration hazard, category 1	H304	May be fatal if swallowed and enters airways.
Specific target organ toxicity - repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.

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2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:

Signal words: Danger

Hazard statements:

H226	Flammable liquid and vapour.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.

EUH204	Contains isocyanates. May produce an allergic reaction.

Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust / fume / gas / mist / vapours / spray.
P331	Do NOT induce vomiting.
P280	Wear protective gloves/ protective clothing / eye protection / face protection.
P301+P310	IF SWALLOWED: immediately call a POISON CENTER / doctor / . . .
P370+P378	In case of fire: use . . . to extinguish.

Contains:	XYLENE (MIXTURE OF ISOMERS) OMOPOLIMERO DI ESAMETILENE-1,6 DIISOCIANATO
	N-BUTYL ACETATE
	2-METHOXY-1-METHYLETHYL ACETATE

Product not intended for uses provided for by Dir. 2004/42/CE.

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

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SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
OMOPOLIMERO DI ESAMETILENE-1,6 DIISOCIANATO		
CAS 28182-81-2	50 ≤ x < 60	Acute Tox. 4 H332, STOT SE 3 H335, Skin Sens. 1 H317
EC		
INDEX -		
N-BUTYL ACETATE		
CAS 123-86-4	16 ≤ x < 19	Flam. Liq. 3 H226, STOT SE 3 H336, EUH066
EC 204-658-1		
INDEX 607-025-00-1		
Reg. no. 01-2119485493-29-XXXX		
XYLENE (MIXTURE OF ISOMERS)		
CAS 1330-20-7	13 ≤ x < 16	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 3 H412, Classification note according to Annex VI to the CLP Regulation: C
EC 215-535-7		
INDEX 601-022-00-9		
Reg. no. 01-2119488216-32-XXXX		
2-METHOXY-1-METHYLETHYL ACETATE		

CAS 108-65-6 EC 203-603-9 INDEX 607-195-00-7 Reg. no. 01-2119475791-29-XXXX **REAZIONE DI MASSA DELL'ETILBENZENE E DELLO XILENE**	8 ≤ x < 9	Flam. Liq. 3 H226, STOT SE 3 H336
CAS - EC 905-588-0 INDEX - Reg. no. 01-2119539452-40-XXXX **HEXAMETHYLENE-DI-ISOCYANATE**	8 ≤ x < 9	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Classification note according to Annex VI to the CLP Regulation: C
CAS 822-06-0 EC 212-485-8 INDEX 615-011-00-1 Reg. no. 01-2119457571-37-0000 **4-TOLUENSOLFONILISOCIANATO**	0,1 ≤ x < 0,4	Acute Tox. 1 H330, Acute Tox. 4 H302, Eye Irrit. 2 H319, Skin Irrit.2 H315, STOT SE 3 H335, Resp. Sens. 1 H334, Skin Sens. 1 H317, Classification note according to Annex VI to the CLP Regulation: 2
CAS 4083-64-1 EC 223-810-8 INDEX 615-012-00-7	0,1 ≤ x < 0,4	Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Resp. Sens. 1 H334, EUH014

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.
INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.
INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

4.2. Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown.

4.3. Indication of any immediate medical attention and special treatment needed

Information not available

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SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Do not breathe combustion products. The product is combustible and, when the powder is released into the air in sufficient concentrations and in the presence of a source of ignition, it can create explosive mixtures with air. Fires may start or get worse by leakage of the solid product from the container, when it reaches high temperatures or through contact with sources of ignition.

5.3. Advice for firefighters

GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.
Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

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SECTION 7. Handling and storage

7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany):
3

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

DEU	Deutschland	TRGS 900 - Seite 1 von 69 (Fassung 29.03.2019)- Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte
ESP	España	LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2019 (INSST)
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Third edition,published 2018)
ITA	Italia	DIRETTIVA (UE) 2017/164 DELLA COMMISSIONE del 31 gennaio 2017
NLD	Nederland	Regeling van de Staatssecretaris van Sociale Zaken en Werkgelegenheid van 13 juli 2018, 2018-0000118517 tot wijziging van de Arbeidsomstandighedenregeling in verband met de implementatie van Richtlijn 2017/164 in Bijlage XIII
POL	Polska	ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 12 czerwca 2018 r
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diário da República, 1.ª série - N.º 111 - 11 de junho de 2018
ROU	România	HOTĂRÂRE nr. 584 din 2 august 2018 pentru modificarea Hotărârii Guvernului nr. 1.218/2006 privind stabilirea cerinţelor minime de securitate şi sănătate în muncă pentru asigurarea protecţiei lucrătorilor împotriva riscurilor legate de prezenţa agenţilor chimici
EU	OEL EU	Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2019

N-BUTYL ACETATE
Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	300	62	600 (C)	124 (C)	
VLA	ESP	724	150	965	200	
VLEP	FRA	710	150	940	200	
WEL	GBR	724	150	966	200	
TGG	NLD	150				
NDS/NDSCh	POL	240		720		

TLV	ROU	715	150	950	200			
TLV-ACGIH			50		150			
Predicted no-effect concentration - PNEC								
Normal value in fresh water				0,18		mg/l		
Normal value in marine water				0,018		mg/l		
Normal value for fresh water sediment				0,981		mg/kg		
Normal value for marine water sediment				0,0981		mg/kg		
Normal value for water, intermittent release				0,36		mg/l		
Normal value of STP microorganisms				35,6		mg/l		
Normal value for the terrestrial compartment				0,0903		mg/kg		

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		2 mg/kg bw/d		2 mg/kg bw/d				
Inhalation	300 mg/m3	300 mg/m3	37.5 mg/m3	12 mg/m3	300 mg/m3	48 mg/m3	600 mg/m3	600 mg/m3
Skin	NPI	3.4 mg/kg bw/d	NPI	6 mg/kg bw/d	NPI	11 mg/kg bw/d	NPI	7 mg/kg bw/d

XYLENE (MIXTURE OF ISOMERS)
Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	440	100	880	200	SKIN
MAK	DEU	440	100	880	200	SKIN
VLA	ESP	221	50	442	100	SKIN
VLEP	FRA	221	50	442	100	SKIN
WEL	GBR	220	50	441	100	
VLEP	ITA	221	50	442	100	SKIN
TGG	NLD	210		442		SKIN
NDS/NDSCh	POL	100				
OEL	EU	221	50	442	100	SKIN
TLV-ACGIH		434	100	651	150	

Predicted no-effect concentration - PNEC						
Normal value in fresh water	0,327	mg/l				
Normal value in marine water	0,327	mg/l				
Normal value for fresh water sediment	12,46	mg/kg				
Normal value for marine water sediment	12,46	mg/kg				
Normal value of STP microorganisms	6,58	mg/l				
Normal value for the terrestrial compartment	2,31	mg/kg				

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic

Oral				1.6 mg/kg bw/d				
Inhalation	174 mg/m3	174 mg/m3		14.8 mg/m3	289 mg/m3	289 mg/m3		77 mg/m3
Skin		108 mg/kg bw/d				180 mg/kg bw/d		

REAZIONE DI MASSA DELL'ETILBENZENE E DELLO XILENE

Predicted no-effect concentration - PNEC		
Normal value in fresh water	327	µg/L
Normal value in marine water	327	µg/L
Normal value for fresh water sediment	12,46	mg/kg/d
Normal value for marine water sediment	12,46	mg/kg/d
Normal value of STP microorganisms	6,58	mg/l
Normal value for the terrestrial compartment	2,31	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				12,5 mg/kg bw/d				
Inhalation	260 mg/m3	260 mg/m3	65,3 mg/m3	65,3 mg/m3	442 mg/m3	442 mg/m3	221 mg/m3	221 mg/m3
Skin				125 mg/kg bw/d				212 mg/kg bw/d

2-METHOXY-1-METHYLETHYL ACETATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	270	50	270	50	
MAK	DEU	270	50	270	50	
VLA	ESP	275	50	550	100	SKIN
VLEP	FRA	275	50	550	100	SKIN
WEL	GBR	274	50	548	100	SKIN
VLEP	ITA	275	50	550	100	SKIN
TGG	NLD	550				
NDS/NDSCh	POL	260		520		SKIN
VLE	PRT	275	50	550	100	SKIN
TLV	ROU	275	50	550	100	SKIN
OEL	EU	275	50	550	100	SKIN

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,635	mg/l
Normal value in marine water	0,0635	mg/l
Normal value for fresh water sediment	3,29	mg/kg
Normal value for marine water sediment	0,329	mg/kg
Normal value of STP microorganisms	100	mg/l
Normal value for the terrestrial compartment	0,29	mg/kg

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Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	1,67 mg/kg				
Inhalation			VND	33 mg/m3			VND	275 mg/m3
Skin			VND	54,8 mg/kg			VND	153,5 mg/kg

HEXAMETHYLENE-DI-ISOCYANATE
Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	0,035	0,005	0,035 (C)	0,005 (C)	
MAK	DEU	0,035	0,005	0,035 (C)	0,005 (C)	C = 0,070 mg/m3
VLA	ESP	0,035	0,005			
VLEP	FRA	0,075	0,01	0,15	0,02	
NDS/NDSCh	POL	0,04		0,08		SKIN
TLV	ROU	0,05	0,007	1	0,14	
TLV-ACGIH		0,034	0,005			

Predicted no-effect concentration - PNEC		
Normal value in fresh water	77,4	µg/L
Normal value in marine water	7,74	µg/L
Normal value for fresh water sediment	13,34	mg/kg
Normal value for marine water sediment	1,33	mg/kg
Normal value for water, intermittent release	774	µg/L
Normal value for the terrestrial compartment	2,6	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation					1 mg/m3	1 mg/m3	0,5 mg/m3	0,5 mg/m3

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

HAND PROTECTION
Protect hands with category III work gloves (see standard EN 374).
The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration

and type of use.

SKIN PROTECTION
Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

EYE PROTECTION
Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	liquid	
Colour	colourless	
Odour	characteristic of solvent	
Odour threshold	Not available	
pH	Not available	Reason for missing data:Non miscibile con acqua
Melting point / freezing point	Not available	
Initial boiling point	Not available	
Boiling range	Not available	
Flash point	23 ≤ T ≤ 60 °C	
Evaporation Rate	Not available	
Flammability of solids and gases	Not available	
Lower inflammability limit	Not available	
Upper inflammability limit	Not available	
Lower explosive limit	Not available	
Upper explosive limit	Not available	
Vapour pressure	20,49 mmHg	
Vapour density	Not available	
Relative density	1,00	
Solubility	Not available	
Partition coefficient: n-octanol/water	Not available	
Auto-ignition temperature	Not available	
Decomposition temperature	Not available	
Viscosity	100 cPs	
Explosive properties	Not available	

Oxidising properties	Not available

9.2. Other information

Total solids (250°C / 482°F)	51,25 %
VOC (Directive 2010/75/EC) :	48,55 % - 487,11 g/litre
VOC (volatile carbon) :	36,39 % - 363,24 g/litre

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

N-BUTYL ACETATE

Decomposes on contact with: water.

2-METHOXY-1-METHYLETHYL ACETATE

Stable in normal conditions of use and storage.

With the air it may slowly develop peroxides that explode with an increase in temperature.

HEXAMETHYLENE-DI-ISOCYANATE

Decomposes at 255°C/491°F.Polymerises at temperatures above 200°C/392°F.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

N-BUTYL ACETATE

Risk of explosion on contact with: strong oxidising agents.May react dangerously with: alkaline hydroxides,potassium tert-butoxide.Forms explosive mixtures with: air.

XYLENE (MIXTURE OF ISOMERS)

XYLENE (MIXTURE OF ISOMERS): stable, but may develop violent reactions in the presence of strong oxidising agents such as sulphuric and nitric acids and perchlorates. May form explosive mixtures with the air.

2-METHOXY-1-METHYLETHYL ACETATE

May react violently with: oxidising substances,strong acids,alkaline metals.

HEXAMETHYLENE-DI-ISOCYANATE

May form explosive mixtures with: alcohols,bases.May react violently with: alcohols,amines,strong bases,oxidising agents,strong acids,water.

10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

N-BUTYL ACETATE

Avoid exposure to: moisture,sources of heat,naked flames.

HEXAMETHYLENE-DI-ISOCYANATE

Avoid exposure to: high temperatures,moisture.

10.5. Incompatible materials

N-BUTYL ACETATE

Incompatible with: water,nitrates,strong oxidants,acids,alkalis,zinc.

2-METHOXY-1-METHYLETHYL ACETATE

Incompatible with: oxidising substances,strong acids,alkaline metals.

HEXAMETHYLENE-DI-ISOCYANATE

Incompatible with: alcohols,carboxylic acids,amines,strong bases.

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

HEXAMETHYLENE-DI-ISOCYANATE

May develop: nitric oxide,hydrogen cyanide.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.
It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

4-TOLUENSOLFONILISOCIANATO

TOSSICITA' ACUTA PER OCCHI E PELLE.

4-TOLUENSOLFONILISOCIANATO

TOSSICITA' ACUTA PER OCCHI E PELLE.

11.1. Information on toxicological effects

XYLENE (MIXTURE OF ISOMERS)

XYLENE (MIXTURE OF ISOMERS): has a toxic effect on the CNS (encephalopathies). Irritating to the skin, conjunctivae, cornea and respiratory apparatus.

Metabolism, toxicokinetics, mechanism of action and other information

2-METHOXY-1-METHYLETHYL ACETATE

The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product.

Information on likely routes of exposure

N-BUTYL ACETATE

WORKERS: inhalation; contact with the skin.

2-METHOXY-1-METHYLETHYL ACETATE

WORKERS: inhalation; contact with the skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

N-BUTYL ACETATE

In humans, the substance's vapours cause irritation of the eyes and nose. In the event of repeated exposure, skin irritation, dermatitis (dryness and cracking of the skin) and keratitis appear.

2-METHOXY-1-METHYLETHYL ACETATE

Above 100 ppm causes irritation of the eye, nose and oropharynx mucous membranes. At 1000 ppm, disturbance of equilibrium and severe eye irritation can be noticed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and eye irritation with direct contact. No chronic effects on humans have been reported (INCR, 2010).

Interactive effects

N-BUTYL ACETATE

A case of acute intoxication been reported involving a 33 year old worker while cleaning a tank with a preparation containing xylenes, butyl acetate and ethylene glycol acetate. The person had irritation of the conjunctiva and upper respiratory tract, drowsiness and motor coordination disorders, which disappeared within 5 hours. The symptoms are attributed to poisoning by mixed xylenes and butyl acetate, with a possible synergistic effect responsible for the neurological effects. Cases of vacuolar keratitis are reported in workers exposed to a mixture of butyl acetate and isobutanol vapours, but with uncertainty concerning the responsibility of a particular solvent (INRC, 2011).

ACUTE TOXICITY

LC50 (Inhalation - mists / powders) of the mixture:
2,50 mg/l
LC50 (Inhalation - vapours) of the mixture:
18,19 mg/l
LD50 (Oral) of the mixture:
Not classified (no significant component)
LD50 (Dermal) of the mixture:
>2000 mg/kg

2-METHOXY-1-METHYLETHYL ACETATE

LD50 (Oral) 8500 mg/kg Rat

LD50 (Dermal) > 3160 mg/kg Rat

LC50 (Inhalation) 6193 mg/m3/4h Ratto

N-BUTYL ACETATE

LD50 (Oral) > 6400 mg/kg Rat

LD50 (Dermal) > 5000 mg/kg Rabbit

LC50 (Inhalation) 21,1 mg/l/4h Rat

HEXAMETHYLENE-DI-ISOCYANATE

LD50 (Oral) > 746 mg/kg rat

LD50 (Dermal) > 7000 mg/kg rat

LC50 (Inhalation) 0,124 mg/l/4h Rat

REAZIONE DI MASSA DELL'ETILBENZENE E DELLO XILENE

LD50 (Oral) > 3500 mg/kg RAT

LD50 (Dermal) > 4350 mg/kg RAT

LC50 (Inhalation) > 29,08 mg/l/4h RAT

XYLENE (MIXTURE OF ISOMERS)

LD50 (Oral) 3500 mg/kg Rat

LD50 (Dermal) 4350 mg/kg Rabbit

LC50 (Inhalation) 26 mg/l/4h Rat

OMOPOLIMERO DI ESAMETILENE-1,6 DIISOCIANATO

LD50 (Oral) > 5000 mg/kg RATTO

LD50 (Dermal) > 2000 mg/kg CONIGLIO

4-TOLUENSOLFONILISOCIANATO

LD50 (Oral) > 2600 mg/kg Ratto

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause respiratory irritation
May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

May cause damage to organs

ASPIRATION HAZARD

Toxic for aspiration

SECTION 12. Ecological information

No specific data are available for this product. Handle it according to good working practices. Avoid littering. Do not contaminate soil and waterways. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation. Please take all the proper measures to reduce harmful effects on aquifers.

12.1. Toxicity

2-METHOXY-1-METHYLETHYL ACETATE	
LC50 - for Fish	> 100 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	> 408 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	> 100 mg/l/72h
Chronic NOEC for Fish	47,5 mg/l Oncothynchus mykiss
Chronic NOEC for Crustacea	> 99 mg/l Daphnia magna
Chronic NOEC for Algae / Aquatic Plants	> 999 mg/l Selenastrum capricornutum

REAZIONE DI MASSA DELL'ETILBENZENE E DELLO XILENE	
LC50 - for Fish	> 2,6 mg/l/96h 2.6 - 8.4
EC50 - for Algae / Aquatic Plants	> 4,6 mg/l/72h 4.6 - 4.9

XYLENE (MIXTURE OF ISOMERS)	
LC50 - for Fish	> 4,2 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	> 2,93 mg/l/48h Daphnia Magna

OMOPOLIMERO DI ESAMETILENE-1,6 DIISOCIANATO	
LC50 - for Fish	> 100 mg/l/96h DANIO RERIO (PESCE ZEBRA)
EC50 - for Crustacea	> 100 mg/l/48h DAPHNIA MAGNA (PULCE D'ACQUA)
EC50 - for Algae / Aquatic Plants	> 100 mg/l/72h SCENEDESMUS SUBSPICATUS

12.2. Persistence and degradability

2-METHOXY-1-METHYLETHYL ACETATE

Solubility in water	> 10000 mg/l

Rapidly degradable

N-BUTYL ACETATE

Solubility in water	1000 - 10000 mg/l

HEXAMETHYLENE-DI-ISOCYANATE

NOT rapidly degradable

XYLENE (MIXTURE OF ISOMERS)

Solubility in water	100 - 1000 mg/l

Degradability: information not available

OMOPOLIMERO DI ESAMETILENE-1,6 DIISOCIANATO

NOT rapidly degradable

12.3. Bioaccumulative potential

2-METHOXY-1-METHYLETHYL ACETATE

Partition coefficient: n-octanol/water	1,2

N-BUTYL ACETATE

Partition coefficient: n-octanol/water	2,3
BCF	15,3

HEXAMETHYLENE-DI-ISOCYANATE

Partition coefficient: n-octanol/water	3,2
BCF	58 fish

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: n-octanol/water	3,12
BCF	25,9

12.4. Mobility in soil

N-BUTYL ACETATE

Partition coefficient: soil/water	< 3

HEXAMETHYLENE-DI-ISOCYANATE

Partition coefficient: soil/water	> 5861

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: soil/water	2,73

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
Waste transportation may be subject to ADR restrictions.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

14.1. UN number

ADR / RID, IMDG, IATA:	1263

14.2. UN proper shipping name

ADR / RID:	PAINT or PAINT RELATED MATERIAL
IMDG:	PAINT or PAINT RELATED MATERIAL
IATA:	PAINT or PAINT RELATED MATERIAL

14.3. Transport hazard class(es)

ADR / RID:	Class: 3	Label: 3
IMDG:	Class: 3	Label: 3
IATA:	Class: 3	Label: 3

14.4. Packing group

ADR / RID, IMDG, IATA:	III

14.5. Environmental hazards

ADR / RID:	NO
IMDG:	NO
IATA:	NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 30	Limited Quantities: 5 L	Tunnel restriction code: (D/E)

	Special Provision: -		
IMDG:	EMS: F-E, S-E	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 220 L	Packaging instructions: 366
	Pass.:	Maximum quantity: 60 L	Packaging instructions: 355
	Special Instructions:	A3, A72, A192	

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

SECTION 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Seveso Category - Directive 2012/18/EC: P5c

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product
Point 3 - 40

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)

WGK 2: Hazard to waters

15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances

N-BUTYL ACETATE

XYLENE (MIXTURE OF ISOMERS)

2-METHOXY-1-METHYLETHYL ACETATE

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 3	Flammable liquid, category 3
Acute Tox. 1	Acute toxicity, category 1
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2

Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Resp. Sens. 1	Respiratory sensitization, category 1
Skin Sens. 1	Skin sensitization, category 1
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H226	Flammable liquid and vapour.
H330	Fatal if inhaled.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.
EUH014	Reacts violently with water.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH204	Contains isocyanates. May produce an allergic reaction.

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008

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- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds

- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

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16. Regulation (EU) 2019/521 (XII Atp. CLP)
- The Merck Index. - 10th Edition
- Handling Chemical Safety
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- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.
Product`s classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12.
The data for evaluation of chemical-physical properties are reported in section 9.

Changes to previous review:
The following sections were modified:
02 / 08 / 09 / 11.